

**REMARKS/ARGUMENTS**

Claims 75-92 are pending. By this Amendment, claims 75, 81, 82 and 89 are amended. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

On December 9, 2009, an interview was conducted between Examiner Mehta and Applicants' attorney, Mr. Zibelli. During the interview, minor amendments to the claims to correct informalities were agreed upon. Also, Examiner Mehta indicated that the amended claim 75 appeared to overcome the applied references subject to a further search, based on the arguments set forth below.

The Office Action objects to claims 75-92 because of informalities. This objection is respectfully traversed.

It is believed that correction of the claims as requested has been accomplished. Withdrawal of the objection is requested.

The Office Action rejects claims 75-92 under 35 USC §112, first paragraph. This rejection is respectfully traversed.

The Office Action asserts that the series of openings and closings of the valve arrangement with preset durations and at preset intervals of time relates to the calibration of the valve or valve arrangement, and is not related to the infusion protocol, referring to [0051]. Paragraph [0051] concerns calibration of the valve.

However, at page 10, starting at line 6 ([0056] in the published application), the specification indicates "Above all, the profile of the curve is set by fixing the duration of the infusion curve, the volume of pharmacological solution that has to be injected on the basis of the infusion curve and the number of days, i.e. the number of repetitions at daily intervals of the

infusion curve, provided for by the infusion protocol. ... The system then calculates the theoretical number, duration and distribution of the opening cycles of the solenoid valve 13 required to plot the infusion curve of which the profile has been set." Thus, the series of openings and closings of the valve arrangement with preset durations and at preset intervals of time do relate to the infusion protocol. Withdrawal of the rejection is requested

The Office Action rejects claims 75-79, 81, 82 and 89-92 under 35 U.S.C. §102(b) over Martin (U.S. Patent No. 4,976,687). This rejection is respectfully traversed.

Claim 75 of the application recites an infusion protocol according to which the pulsed actuation is made, which infusion protocol is not modifiable. The infusion protocol includes at least an infusion curve, the infusion curve being defined by definition parameters comprising a duration of infusion, a volume of pharmacological solution to be infused, and a shape of the infusion curve, wherein a number, a duration and a distribution of opening cycles of said valve arrangement are calculated to plot said infusion curve.

Martin does not disclose that the infusion protocol is not modifiable as recited in claim 75. In Martin, the flow rate of the solution is determined and retroactively controlled on the basis of pressure signals provided to the controller in a closed loop system. The microprocessor 116 responds to the differential pressure as sensed by the two pressure transducers 114, 120 to maintain the preset flow rate. See col. 6, lines 60-63. The system of claim 75 is not feed-back controlled but is governed by a preprogrammed infusion protocol that is not modifiable, with a series of openings and closings on the valve arrangement.

Further, Martin does not disclose an infusion protocol according to which the pulsed actuation is made, the infusion protocol including an infusion curve, the infusion curve being defined by definition parameters comprising a duration of infusion, a volume of pharmacological

solution to be infused, and a shape of the infusion curve, wherein a number, a duration and a distribution of opening cycles of said valve arrangement are calculated to plot said infusion curve, as recited by claim 75. Accordingly, Martin does not anticipate claim 75, or any of the claims that depend from it.

The Office Action rejects claims 80 and 83-85 under 35 U.S.C. §103(a) over Martin in view Kanai (U.S. Patent No. 6,367,502). This rejection is respectfully traversed.

This rejection is respectfully traversed at least because claims 80 and 83-85 depend either directly or indirectly from claim 75, and are patentable by virtue of that dependency in addition to the further features they recite in combination with claim 75. Reconsideration and withdrawal of the rejection are respectfully requested.

The Office Action rejects claims 86-88 under 35 U.S.C. §103(a) over Martin in view of Franetzki et al. (U.S. Patent No. 4,270,532). This rejection is respectfully traversed.

This rejection is respectfully traversed at least because claims 86-88 depend either directly or indirectly from claim 75, and are patentable by virtue of that dependency in addition to the further features they recite in combination with claim 75. Reconsideration and withdrawal of the rejection are respectfully requested.

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140 under Order No. DJZ-4017-41.

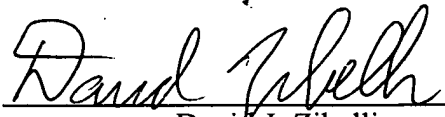
Should the Examiner believe that anything further is desirable to place the application in better condition for allowance, he is invited to contact the undersigned at the telephone number

PIROVANO ET AL.  
Appl. No. 10/563,909  
December 10, 2009

listed below.

Respectfully submitted,

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